



# Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
www.dnr.illinois.gov

Pat Quinn, Governor  
Marc Miller, Director

February 11, 2013

Mr. Walter Jones III  
Village of Hopkins Park  
13080 E. Central Street  
Pembroke Township, IL 60958-5034

**RE: Black Oaks Village, Deenslake Affordable Housing, Kankakee County  
Endangered Species Consultation Program  
EcoCAT Review #1309136**

Dear Mr. Jones:

The Department received this proposed action from Deenslake Affordable Housing for consultation with the Village of Hopkins Park in accordance with the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075. The proposed action entails construction of a 12-unit apartment complex on an undeveloped parcel within the Village at 13509 E 3000S Road.

No species listed as endangered or threatened under the federal *Endangered Species Act* [16 USC 1531 *et seq.*] are known to be present in the vicinity of the proposed action.

The site of the proposed action is located approximately one mile south of a branch of Spring Creek which supports the state-listed threatened **Ironcolor Shiner**, *Notropis chalybaeus*, and the threatened **Starhead Topminnow**, *Fundulus dispar*. These two species, plus the **Weed Shiner**, *Notropis texanus*, also occur in the headwaters of Little Beaver Creek, about the same distance south of the project area. Due to distance and topography, it is the Department's opinion the proposed action is *unlikely* to adversely modify the essential habitat of the Ironcolor Shiner, the Weed Shiner, or the Starhead Topminnow.

The site of the proposed action is located approximately 0.6 miles northwest of the **Sweet Fern Savanna Land & Water Reserve** and the slightly larger **Sweet Fern Savanna Illinois Natural Areas Inventory (INAI) Site**. Due to distance and topography, it is the Department's opinion the proposed action is *unlikely* to adversely modify the Land & Water Reserve or the INAI Site.

The state-listed threatened **Prairie Hognose Snake**, *Heterodon nasicus*, has been documented about two miles south of the project area. However, none have been reported since 1996, and the herpetologist who identified the specimens at that time speculated the individuals, one of which was a juvenile, had been introduced. But this species has also been recorded at the nearby (six miles) Iroquois County

Conservation Area. Even if introduced, the species is entitled to statutory protection if it persists and cannot be distinguished, while the presence of a juvenile suggests a potential for reproduction. Assuming the species was introduced, and considering the distance involved, it is the Department's opinion this species is *unlikely* to be present within the project parcel, but the Department is unable to dismiss the possibility, because the habitat is ideal and no barriers to dispersal exist. Persons working on the project should be made aware of the possibility of encountering this animal and the steps to be taken should that occur.

However, Sweet Fern Savanna supports populations of the state-listed threatened **Ornate Box Turtle**, *Terrepenne ornata*, and the state-listed threatened **Regal Fritillary Butterfly**, *Speyeria idalia*. These species are not limited to Sweet Fern Savanna, but have been recorded at multiple locations within Hopkins Park and its vicinity. The site of the proposed Black Oaks Village comprises habitat suitable for both species.

It is the Department's opinion the proposed action is *likely* to adversely modify the essential habitat of the Ornate Box Turtle and the Regal Fritillary Butterfly. In addition, it is *likely* one or more of fourteen state-listed plants within the vicinity also occur on the parcel in question. If these animal species are present within the parcel, it is likely development activities may result in prohibited takings, unless authorized by the Department of Natural Resources. If the plants are present, the land owner may authorize takings of the plants. The Department offers the following recommendations to the Village.

*Recommendation #1: Development activities involving any disturbance of soils or vegetation on the site should be preceded by a biological survey for the Regal Fritillary Butterfly and its obligate larval host plants, Violets.*

Females of the Regal Fritillary lay their eggs over wide areas in September, attaching them a few at a time to a broad array of plants. The eggs hatch in late autumn and the new larvae fall to the ground where they over-winter in the vegetative litter. In spring, the larvae must quickly find a suitable host plant. This species feeds exclusively on plants of the genus *Viola*. It is likely the great majority of new larvae fail to find a suitable host and perish.



Many sources suggest particular species of Violet are needed, but eight different species have been documented to support feeding by the caterpillars, though some species of Violet appear preferred over others. But the host plants must also occur in a specific vegetative community typical of tallgrass prairie or reproduction will not be successful. By late spring, caterpillars have entered cocoons and begun metamorphosis.

The Regal Fritillary is dimorphic, so adult males can be fairly easily distinguished from adult females by their wing markings. Adult males emerge in late June, about two weeks before adult females emerge beginning in July. Thus, late June is the earliest surveys can be performed which rely on identifying adult butterflies.



The two sexes co-exist for only about ten days, during which mating occurs; afterwards the males die, but females enter a state of arrested reproductive development called diapause. This prevents eggs from ripening until September, when egg-laying begins. Meanwhile, females must subsist on nectar from flowering plants, and they may fly far and wide in search of them. (Females have been documented as far as 20 miles from their hatching location.) After their supply of eggs is exhausted, females also die. This species is a prolific egg-layer; a single female deposits several thousand eggs.

All life stages of these insects—eggs, caterpillars, and adults—are protected by law, but eggs and caterpillars are more difficult to detect than adults. An adult may be a transient where it is observed, so attention must be paid to the plant community in which the observation occurs. In reproductive habitat, *the species is present throughout the year*, though not visible, and such habitat should not be disturbed at any time of year without appropriate authorization to avoid potential criminal liability. This species is vulnerable to pesticides commonly used for mosquito control containing *permethrin* or *BTK* as active agents.

*Recommendation #2: Development activities involving any disturbance of soils or vegetation on the site should be preceded by a biological survey for the Ornate Box Turtle.*



The Ornate Box Turtle is a terrestrial animal which seldom enters the water, spending most of its life on land. And much of that is spent underground. While sand prairies may be preferred, this species formerly was found widely across Illinois, wherever friable soils provided suitable burrowing habitat. The sandy areas of Kankakee and Iroquois Counties remain among the few areas where this species can be considered relatively abundant.

The Ornate Box Turtle may share its habitat with the Eastern Box Turtle, but the two are easily distinguished by their shell markings. The Eastern Box turtle may often be found in woods, whereas the Ornate prefers much more open habitat, but may still be found where trees are encroaching on the habitat.

In early September, the Ornate Box Turtle excavates a winter burrow as deep as three or four feet. They estivate (not a true form of hibernation) until late the following April, when they emerge and begin their round of mating and feeding activities. Surveys for this species should not be performed until May, when temperatures are consistently high enough the animals will be reliably active during the day.

This species will dig several shallow burrows within its home range, or use the burrows of larger mammals (the shell lengths of this species seldom exceed six inches). It emerges from a burrow in the early morning and actively forages for several hours, but begins to seek shelter when ground temperatures approach 90 degrees. It may do this by seeking the shade of shrubs or other vegetation, or digging a shallow burrow called a “form,” where it will shelter until temperatures moderate, when it

again actively forages for food: insects, worms, carrion, or small rodents. Generally, it spends the night in a burrow, except during egg-laying.

Females lay eggs at night in late May and early June. Sometimes eggs are laid in the burrow, but nests are often excavated near an opening or break in the habitat. On a wildlife refuge in northwestern Illinois, 50% of the nests were excavated on or adjacent to the only road through the habitat.

Home ranges are typically small, with the largest being no more than several hundred acres, but home territories are not exclusive and the territories of several individuals may overlap. Where populations are healthy, there may be as many as one turtle per acre of habitat. This species is extremely loyal to its home turf; it will make every effort to return if removed and is reluctant to vacate areas which are extensively disturbed. (Efforts to relocate this species to Wisconsin from Nebraska required penning the turtles for more than two years before they accepted their new location.)

These characteristics mean the species is hard to observe (just walking through the habitat gives only a 3% chance of detection, when the turtles are active) but, if present, it will also be very difficult to implement the proposed action without committing a prohibited “take.” It also means that conversion of its habitat to lawns or hard surfaces will present challenges to both the turtles and to residents.

The presence of any endangered or threatened species does not bar the Village from authorizing the project, but may place the developer at risk of liability if the project is pursued. Persons who believe they may inadvertently commit a prohibited “take” of a listed animal may seek authorization from the Department under Title 17 *Illinois Administrative Code* Part 1080.

*Recommendation #3: The Village may wish to consider a program encouraging residents to report observations of Ornate Box Turtles and Regal Fritillaries to the Village, but they should be warned that capturing or handling these species unlawful. The Village would benefit from having a more complete picture of their distribution within the Village and its vicinity in order to facilitate planning future development projects in ways that are most compatible with their continued presence.*

*Recommendation #4: Development activities involving any disturbance of soils or vegetation on the site should be preceded by a botanical survey for state-listed endangered and threatened plant species known from the near vicinity. June and July are the best survey months.*

*Recommendation #5: The developer may wish to consider providing authorization to all contractors involved with the project to “take” any state-listed plants which may exist on the parcel in question.*

The Sweet Fern Savanna and Pembroke Land & Water Reserves support at least fourteen species of state-listed endangered and threatened plants. However, these species are not limited to areas within the Reserves, and may occur throughout the Village in suitable habitat. It is quite possible that one or more species of listed plants occur on the parcel in question.

However, plants are deemed the property of the land owner, and the statute allows the owner to determine the fate of any such plant he or she may own. However, *it is a Class A misdemeanor for any other person to harm such a plant in any manner without the written permission of the owner.* Providing contractors with permission to take listed plants relieves them of potential legal liability.

The Department encourages owners to identify and conserve any listed plants they may own, and the Department can offer advice on how to do so consistent with the owner's plans for the property. Among the fourteen State-listed plants known to occur within Hopkins Park and its vicinity are, in no particular order:

**Old Plainsman**, *Hymenopappus scabiosaeus*  
**Sweetfern**, *Comptonia peregrina*  
**Eastern Blue-eyed Grass**, *Sisyrinchium atlanticum*  
**Clustered Sedge**, *Carex cumulata*  
**Reticulated Nutrush**, *Scleria muhlenbergii*  
**Carolina Whipgrass**, *Scleria pauciflora*  
**Highbush Blueberry**, *Vaccinium corymbosum*  
**Bristly Blackberry**, *Rubus schneideri*  
**Marsh Speedwell**, *Veronica scutellata*  
**Shore St. John's Wart**, *Hypericum adpressum*  
**Weak Bulrush**, *Schoenoplectus purshianus*  
**Carey's Heartsease**, *Polygonum careyi*  
**Primrose Violet**, *Viola primulifolia*  
**Narrow-leaved Sundew**, *Drosera intermedia*

The current concept plan for this development leaves little room to preserve, restore, or protect habitat for plants or animals, although the storm water easement and the front, rear, and side lot-line setbacks offer some potential to do so, though specific management techniques would be called for that may not conform to Village requirements for vegetation management in residential areas.

If on-site conservation is considered impractical, conservation of the genetic material through gathering roots, rhizomes, seeds, or entire plants and translocating them to suitable habitat is one possibility. The least-preferred approach is to mitigate the loss of the plants and habitat through the permanent protection of an equal or greater amount of other habitat where the listed plants are already present or to which they may be successfully translocated. Some financial incentives are available if appropriate habitat is protected.

Consultation on the part of the Department is terminated, unless the Village of Hopkins Park desires additional information or advice related to this proposal. In accordance with 17 Ill. Adm. Code 1075.40(h), the Village must notify the Department of its decision regarding these recommendations, whether it will:

- Proceed with the action as originally proposed;
- Require the action to be modified per Department recommendations (please specify which measures if not all will be required); or
- Forgo the action.

This consultation is valid for two years unless new information becomes available which was not previously considered; or the proposed action is modified; or additional species, essential habitats, or

Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review primarily reflects the information existing in the Illinois Natural Heritage Database at the time of this consultation, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments.

If additional protected resources are encountered during the project's implementation, the applicant must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action. Please contact me if you have questions regarding this review.

Sincerely,

A handwritten signature in black ink that reads "Keith M. Shank". The signature is written in a cursive style with a large initial "K".

Keith M. Shank  
Impact Assessment Section  
Division of Ecosystems and Environment  
[keith.shank@illinois.gov](mailto:keith.shank@illinois.gov)  
(217) 785-5500

cc: Ira J. Sneed, Deenslake Affordable Housing